

**DRAFT, June 13, 2005**

**California Transportation Commission  
DRAFT STIP/SHOPP ALLOCATION PLAN PRIORITY CRITERIA  
June 2005**

**Guiding Principles:**

- Provide economic stimulus.
- Provide for maximum use of TIF funds and federal funds.
- Maintain existing STIP/SHOPP programming and allocation process.
- Act in accordance with statutory priorities (Streets and Highways Code Section 167).
- Work with Caltrans and regional agencies to identify project priorities.
- Maintain equity in process.

**General Allocation Plan Priorities:**

- Limit allocations to STIP and SHOPP projects programmed for allocation in 2005-06 and to projects with extensions to 2005-06.
- All projects programmed for 2005-06 in the following categories will receive allocations as they are delivered:
  - SHOPP projects, as identified by the Department.
  - Projects eligible for funding from federal Transportation Enhancement (TE) funds.
  - Projects eligible for funding from the Public Transportation Account (PTA).
  - Annual STIP allocations for planning, programming, and monitoring.
  - Required STIP mitigation projects for construction projects already allocated.
  - Projects to match federal bridge (HBRR) funds.
- Projects programmed for 2005-06 in the following categories will receive allocations as delivered (first-come, first served) until September 2005 or until the Commission has allocated \$500 million for these projects, whichever is earlier [*or substitute other appropriate date and dollar amount*]. At that time, the allocation plan will be reviewed, and these projects may be given priority for allocation in the following category order:
  - Interregional road system projects.
  - Highway/railroad grade separation projects.
  - Projects to increase the capacity of other state highways and local roads by adding new lanes.
  - Operational improvements, including improvements to interchanges, intersections, signals, turn lanes, etc.
- The Commission will give lower priority to STIP projects in the following categories, funding them only when funding comes from TE or PTA or when funding is sufficient to fund all projects in higher priority categories:
  - Local road rehabilitation and reconstruction.
  - Bicycle and pedestrian facilities.
  - Landscaping.
  - Enhancements, including soundwalls and signage.

- Transportation demand management, including ridesharing and freeway service patrols.
  - Reserves not designated for specific projects (RSTP/CMAQ match, AB 3090 replacement).
- Allocations will be made for any project component programmed in 2005-06 (environmental, design, right-of-way, or construction) according to the criteria above.
- Within each category above, the Commission will consider the following for individual projects on a case-by-case basis, as necessary:
  - Regional and Caltrans priority.
  - Season-sensitivity of project (if not voted now, project misses the construction season).
  - Project delivery status and order of delivery.
  - Match of available TCRP funds.
  - Status of county shares.
- The Commission will regard project components brought for a vote as meeting STIP timely use of funds deadlines, even if an allocation vote is not possible for lack of funds. The Commission will consider time extensions on a case-by-case basis only.

# STIP PROJECTS PROGRAMMED IN 2005-06

(\$1,000's)

	Total	Caltrans Support	Allocation
Public Transportation (PTA)	70,541	0	70,541
Transportation Enhancement (TE)	90,405	1,201	89,204
Planning, programming, & monitoring	11,249	0	11,249
Local roads, bridge rehab	7,934	0	7,934
Interregional roads	649,698	51,356	598,342
Grade separations	32,957	3,900	29,057
State highways, widening (RIP)	148,782	8,448	140,334
State highways, operational (RIP)	56,094	6,616	49,478
Local roads, capacity	123,908	0	123,908
Local roads, operational	13,410	0	13,410
State highways, landscaping	6,985	1,131	5,854
Local roads, rehabilitation	70,372	0	70,372
Local roads, enhancements (non-TE)	6,077	0	6,077
TDM/ridesharing	9,595	0	9,595
Reserves, undesignated	3,415	0	3,415
Total	1,301,422	72,652	1,228,770

## PROPOSED CHANGES TO SECTION 19 OF THE COMMISSION'S ADOPTED STIP GUIDELINES

19. Criteria for Measuring Performance and Cost-Effectiveness. In order to maximize the state's investments in transportation infrastructure, it is the Commission's policy that each RTIP and the ITIP will be evaluated, as they are developed, for performance and cost-effectiveness at the system ~~or~~ and project level ~~as~~ where appropriate. For ~~large~~ new projects **that propose applying over 25% of a county's available share identified in the fund estimate or are over \$50 million dollars and all joint RTIP projects that propose ITIP funding, —for which major investment studies are undertaken,** a project level evaluation is preferable. The evaluation should be ~~done~~ **conducted** by each region and by Caltrans before the RTIPs and the ITIP are submitted to the Commission for incorporation into the STIP. Beginning with the 2002 STIP cycle, each RTIP and the ITIP submitted to the Commission will be accompanied by a report on its performance and cost-effectiveness. ~~Ideally, as performance measurement concepts and techniques mature,~~ Regional agencies and Caltrans will, as part of the transportation planning and programming process, monitor transportation systems and projects for performance and ~~refine~~ **provide** performance forecasts for use in evaluation of **the current and future RTIPs and ITIPs. As performance measurement concepts and techniques continue to mature, updated guidance may be provided in future STIP guidelines.**

The Commission will consider the evaluations submitted by regions when making decisions on RTIPs as described in Section 60 of these guidelines. The Commission will consider evaluation submitted by Caltrans when making decisions on the ITIP as described in Section 62 of these guidelines.

The evaluation report should clearly demonstrate how effective the RTIP or the ITIP is in addressing or achieving the goals, objectives and standards which are established as part of the respective regional transportation plan (RTP) or Caltrans' Interregional Transportation Strategic Plan (ITSP). The purpose of the evaluation report is to assess the performance and cost effectiveness of each RTIP and the ITIP based on its own merits, not to attempt a comparative assessment between individual RTIPs or RTIPs and the ITIP. RTIP evaluations should also address how the RTIP relates to the ITSP at key points of interregional system connectivity. Caltrans' evaluation of the ITIP should address ITIP consistency with the RTPs. Each region is responsible for establishing the transportation goals, ~~and objectives and standards to be used in its evaluation~~ of its RTIP **performance**. However, ~~the Commission urges~~ each region ~~should to~~ consider **including** improvements to mobility, accessibility, reliability, **safety, and productivity (throughput) and sustainability and safety** as part of the fundamental **performance** goals of ~~any~~ its long-range transportation plan **and its RTIP submittal**.

Regions and Caltrans are responsible for ~~determining the techniques and methodology to be used in evaluating the performance and cost-effectiveness of~~

**~~RTIPs and the ITIP~~ developing goals, objectives and priorities based on system performance.** The Commission recognizes that many measures of performance and benefit are difficult to evaluate and may be more subjective rather than measurable in quantifiable units. In order to facilitate statewide consistency, regions and Caltrans, should also consider using (when appropriate) values of performance and benefits and evaluation methodologies which are commonly accepted and which represent accepted or standard practice. The Commission encourages regions to consider using (when appropriate) values of time, safety, vehicle operation costs and discount rates which are developed by Caltrans for benefit cost analysis of transportation projects.

The Commission does expect that evaluations of performance and cost-effectiveness will be for a 20-year period or on a life cycle basis. Reports to the Commission on evaluations of performance and cost effectiveness should be presented in a format which is disaggregated to the level of the benefits and measures used.

In establishing the following criteria the Commission recognizes that it ~~is may be~~ difficult to develop and utilize criteria that is relevant in both urban and non-urban regions **or relevant at both a statewide and regional level.** Different criteria may apply depending on the complexity of a region ~~and its RTP/RTIP or the functionality of an interregional route.~~ To this end, ~~the each~~ regions ~~should select and utilize criteria most applicable to its own jurisdiction~~ and Caltrans should use the criteria provided below, and are encouraged to highlight other criteria that are essential for the purposes of program development and project selection. Where applicable, the performance measures listed in [Table/Appendix ?] should be used to quantitatively evaluate the criteria below. Results of analysis will not only be used to forecast the impact on the transportation system of projects contained in the RTIPs and the ITIP, but also indicate current system performance, thereby establishing a baseline from which future performance trends may be observed.

Regions and Caltrans should ~~use consider~~ the following criteria for measuring performance of RTIPs and the ITIP:

1. Change in vehicle occupant, freight and goods travel time or delay.
2. Change in accidents and fatalities.
3. Change in vehicle and system operating costs.
4. Change in access to jobs, markets and commerce.
5. Change in frequency and reliability of rail/transit service.
6. Change in air pollution emissions.
7. Change in passenger, freight and goods miles carried.

Regions and Caltrans should consider the following criteria for measuring cost-effectiveness of RTIPs and the ITIP:

1. Decrease in vehicle occupant travel, freight and goods time per thousand dollar invested.
2. Decrease in accidents and fatalities per thousand dollar invested.
3. Decrease in vehicle and system operating cost per thousand dollar invested.
4. Improved access to jobs, markets and commerce per thousand dollar invested.
5. Increased frequency reliability of rail/transit service per thousand dollar invested.
6. Decrease in air pollution emissions per thousand dollar invested.
7. Increase in annual passenger, freight and goods miles carried per thousand dollar invested.

**TABLE A: Performance Indicators, Measures and Definitions**

Indicator	Relation to Section 19 Performance Criteria	Performance Measures			Definition/Indication
		Mode	Level*	Measures	
Safety	2	Roadway	Region	Fatalities /Vehicle Miles Traveled (VMT)	Indicates the ratio of the number of fatalities to the number of vehicle miles traveled.
	2			Fatal Collisions / VMT	Indicates the ratio of the number of fatal collisions to the number of vehicle miles traveled.
	2			Injury Collisions / VMT	Indicates the ratio of the number of injury collisions to the number of vehicle miles traveled.
	2	Transit	Mode	Fatalities / Passenger Miles	Indicates the ratio of the number of fatalities to the number of passenger miles traveled.
Mobility	1	Roadway	Region	Passenger Hours of Delay / Year	Indicates the total amount of delay per traveler that exists on a designated area over a selected amount of time.
	1			Average Peak Period Travel Time	Indicates the average travel time for peak period trips taken on regionally significant corridors and between regionally significant origin and destination pairs.
	1			Average Non-Peak Period Travel Time	Indicates the average travel time for non-peak period trips taken on regionally significant corridors and between regionally significant origin and destination pairs.
Accessibility	4 (also 1,3,6,7)	Transit	Region	Percentage of population within 1/4 mile of a rail station or bus route.	Indicates the accessibility of transit service.
Reliability	1	Roadway	Corridor	Travel Time Variability	Indicates the difference between expected travel time and actual travel time.
	5	Transit	Mode	Percentage of vehicles that arrive at their designated destination no more than 5 minutes late.	These measures indicate the ability of transit service operators to meet customers' reliability expectations.
	5			Percentage of vehicles that leave early for their next designated destination.	

\*Level:

Corridor - Routes or route segments that are identified by regions and Caltrans as being significant to the transportation system.

Region - Region or county commission that is responsible for RTIP submittal.

Mode - One of the following transit types (light rail, heavy rail, commuter rail, trolley bus, and all forms of bus transit).

**TABLE A: Performance Indicators, Measures and Definitions**

Indicator	Relation to Section 19 Performance Criteria	Performance Measures			Definition/Indication
		Mode	Level*	Measures	
<b>Productivity (Throughput)</b>	7	Roadway - Vehicles	Corridor	Average Peak Period Vehicle Trips	Indicates the utilization of the transportation system by all vehicles.
	7			Average Daily Vehicle Trips	
	7	Roadway - People	Corridor	Average Peak Period Vehicle Trips Multiplied by the Occupancy Rate	Indicates the utilization of the transportation system by people.
	7			Average Daily Vehicle Trips Multiplied by the Occupancy Rate	
	7	Trucks	Corridor	Percentage of Average Daily Vehicle Trips that are Trucks	Indicates the utilization of the transportation system by trucks.
	7			Average Daily Vehicle Trips that are Trucks	
	7	Transit	Mode	Passengers per Vehicle Revenue Hour	Indicates the effectiveness of mass transportation system operations by measuring the number of passengers carried for every mile of revenue service provided.
	7			Passengers per Vehicle Revenue Mile	
	7			Passenger Mile per Train Mile (Intercity Rail)	
<b>System Preservation</b>	3	Roadway	Region	Total number of Distressed Lane Miles	Indicates the number of lane miles in poor structural condition or with bad ride (pavement condition).
				Percentage of Distressed Lane Miles	
				Percentage of Roadway at Given IRI Levels	Indicates roadway smoothness.
<b>Return on Investment/ Lifecycle Cost</b>	1-7				Return on Investment indicates the ratio of resources available to assets utilized. Lifecycle Cost Analysis is Benefit-Cost Analysis that incorporates the time value of money.

\*Level:

Corridor - Routes or route segments that are identified by regions and Caltrans as being significant to the transportation system.

Region - Region or county commission that is responsible for RTIP submittal.

Mode - One of the following transit types (light rail, heavy rail, commuter rail, trolley bus, and all forms of bus transit).



## **TCRP Benefits Survey**

### **Survey Evaluation Criteria:**

#### **Timing and Methodology of the Survey**

In early 2004, the Business, Transportation and Housing Agency (BTH), working with the California Department of Transportation (Department) and Regional Transportation Planning Agencies (RTPAs), conducted a survey to assess the benefits derived from TCRP projects. The intent was to identify TCRP projects that produce the greatest benefit for defined benefit categories. Applying a summation ranking, using a uniform or non-uniform weighting for each subject area, allows the projects to be rated for overall benefits or to be sorted to evaluate benefits under different scenarios and delivery criteria. For example, projects ready for construction can be evaluated separately from projects not ready for construction. Additional sorts and rankings can be made by transportation mode, geographic area or other criteria.

Each response was reviewed to evaluate quality of response (address relationship of response to survey subject area, determine if the response contained questionable or obviously inaccurate information, or determine if the response lacks known information), and content of the response relative to the subject area. Where the quality and / or content of the response was lacking, the Department considered additional known information for each project. Additional information available includes, but is not limited to, Benefit / Cost ratios where known; the level of congestion for a facility and associated vehicle hours of congestion; relationship of the project to interregional or interstate goods movement, and the location of the project with respect to known economically depressed or high unemployment areas.

#### **Evaluation Criteria**

Following are the principal criteria for which all projects were evaluated. Evaluations were assigned a high, medium or low rating **for each survey subject area** based upon the applicant's response. There was a significant range in the completeness and exactness of responses. Responses were evaluated on the information provided and other known information.

The categories of 1) funding and deliverability, 2) economic development, 3) regional conformity, 4) goods movement, and 5) relative funding from Federal or local sources, were evaluated. Additional consideration was granted for various responses in the "other benefits" category. This information was used in overall qualitative and impact considerations for the projects and Program.

- **Funding and Deliverability**

To what extent can the project be completed based on existing funding plans. The responses were evaluated and were given a general ranking based on the ability of the agency to identify a completion plan, and the relative risk associated with the plan. Projects that can be completed near-term were generally rated higher than projects that are likely to be completed in later years.

Fully Funded (separate sort)

- Projects completed or in construction that can be completed with the existing allocated funds (TCR funds and other funds) are not included in the survey analysis.

High

- Projects that can be completed with a new allocation of TCR funds for construction / procurement. Non-TCRP funds needed for initiation of construction activities are either secured or there is a reasonable expectation that funds will be available. Project is delivered or on track for delivery in FY 2005-06.

Medium

- Projects with large committed investment of local funds that will likely result in full funding from the 2006 STIP or identifiable sources on a similar timeline.
- Projects that are fully funded with construction start in FY 2006-07 or beyond.

Low

- Projects that have a funding strategy that is not reliable requiring multiple voter initiatives, multiple STIP cycles or similar long-term strategies.
- Projects that lack an identified funding strategy.

- **Economic Development**

To what extent the project encourages new business development or location to create jobs and incomes. {High – identified commitments to new business development, Medium – local planning actions to encourage business development, Low – non-response or no identifiable connection.}

- **Regional Conformity**

Is the project a Transportation Control Measure, or if not, will regional conformity fail without emission reductions from the project?

{High – yes to either portion of question, Medium – project provides air quality benefits overall in non-attainment area, Low – non-response or area is in attainment and no impacts.}

- **Effects on Goods Movement**

Does the project do any of the following: 1) remove or mitigate a “choke point”, 2) provide an alternative travel corridor around a choke point, and/or access to other routes or developments, 3) improve access and/or remove restrictions to truck/rail movements (ex. grade separation), 4) improve access to a major freight facility (intermodal terminal, seaport, airport, major truck terminal or complex), 5) improve operations and safety (ex. separates trucks from other traffic, improves ingress/egress, reduces need for lane changes or turning movements), and 6) rehabilitate a substandard highway, roadway, or rail corridor design (ex. sub-standard geometrics that cannot handle STAA trucks).

{High – direct and documented linkage to one or more criteria, Medium – project has non-documented but indirect known goods movement benefits, Low – non-response or no goods movement impact (typically no or few STAA size trucks).}

- **Leveraged STIP or Federal Funds**

To what extent does the project leverage other State or Federal funding. Projects that require an allocation of TCRP funds to complete allocated STIP projects or to match 2005-06 STIP allocations are given the highest ranking. Additional ranking is given based on the percentage of Federal or local funding to the total funding plan.

{High – significant Federal or local funding as a percent of overall funding plan, Medium – projects with portions funded from Federal or local sources, Low – projects whose funding is all or mostly TCRP funds only.}

- **Other Benefits** – consideration given based on following:

- T4ED - Transportation for Economic Development (California Department of Transportation – June 2003). Relationship of transportation investments to state’s worst pockets of poverty and joblessness. Transportation investments play a role in each area’s own efforts to create jobs and relieve economic hardships.
- State highway system Focus Routes (to improve interregional travel).
- Enhances environmental justice.
- Significant focus on Safety - eg, grade separations, pedestrian crossings or other safety measures, safe routes to schools, etc.
- Examples of "stellar" multiple and "cross - over" benefits in one project. Project has qualitative sense of a "complete project where land use, housing, mobility, smart growth, environmental justice, commercial /jobs" all come together.